




Building Consistency Meeting

Residential

Date: 10/1/2008 Recorder and minutes prepared by: Danny Wooten/Jeff Griffin

Staff present: Jeff Griffin, Danny Wooten, David Williams, Tim Taylor, Steve Kellen, Ron Dishman, Harold Sinclair, Paul Cupp, Walt Nash, George Rogers, Randy Newman, Ken Turull, Ron Yoho, Michael Johnson, Andrew DeMaury.

Public present: Hans Kasak/Greg Sloan (**Ryland Homes**); Daniel McBride (**Cunnane Group**); Jason Whitener (**Southern Tradition**); Wayne Carter (**Evergreen Homebuilders**); Rob Merrell/Kevin Ratliff (**Griffin Masonry**); Charles Sofinowski/Darren Price (**M/I Homes**); David Piddock/Michael Najulra (**Barefoot & Co**); Timothy Lawrence (**Intelligent Design Eng**); Darren Price/Charles Sofirowski (**M/I homes**); Lou Salvador (**DR Horton**); Brad Crysler (**John Wieland Homes**); A. Wynn Yates (**Yates/Smith engineering, PA**); David Schwieman (**DR Schwieman, Inc**); Terry Cleary (**Meeting Street**); Ryard Stevens (**Johnson Const.**); Dave Reynolds (**BFS**); Rodney Fazilat (**True Homes**); John Meeks (**Apple Blossom Insulators**).

Topics/Subject	Decisions/Conclusions/Actions
Old Business	
None	
New Business	
Distributed handout on ICC hearing items and discuss 2 major changes proposed in future codes	<p>ICC Online News P</p>  <p>News</p> <p>Code hearings feature major issues, dramatic moments</p> <p>The effectiveness of the International Code Council's open code development process is playing out in the concluding sessions of the Final Action Hearings in Minneapolis as major changes, already approved, dominate the proceedings.</p> <p>Actions so far:</p> <ul style="list-style-type: none"> • The 2009 <i>International Residential Code</i> will require sprinklers in all new one- and two-family residences (including townhouses) as of Jan. 1, 2011, a change approved by more than 73% of the voting members • An additional stairway will be required in new skyscrapers unless an elevator that can operate during a fire emergency is usable by occupants • Elevators, properly constructed for such use, will be authorized for occupant evacuation • A comprehensive energy package of code changes (EC14) that required 67% to pass, failed by a small margin, receiving 64%. (A series of partial measures proposed by supporters of the defeated code change proposals will occupy much of today's schedule, as supporters attempt to pass separately the efficiency proposals that were defeated as a block) • Regulations under the IBC and IRC for pools will now reference a new standard for entrapment designed to be consistent with the Virginia Graeme Baker Federal Pool and Spa Safety Act • Carbon monoxide alarms will be required in homes where there is fuel-fired equipment or an attached garage <p>RB64 and RB71 both approved per public comment #2 were discussed in detail. RB64 will require sprinkler systems in all houses, two-family</p>

and townhouse structures as of January 1, 2011. It was noted that this issue will now go from the National Code approval to the NC Building Code Council for approval and could come out as written or possible some modified form in the 2012 NC Code unless the BCC requires this earlier. We will continue to monitor this development and discuss time tables as available. RB71 is the requirement under the Code for carbon monoxide detectors which are already being required in Mecklenburg County by Health Department ordinance. A copy of that specific language for both is listed below:

RB64

Public Comment 2:

Ronny J. Coleman, Retired California State Fire Marshal, representing Fire Sprinkler Coalition, requests Approval as Modified by this Public Comment.

Replace proposal as follows:

SECTION R313 SPRINKLER PROTECTION

R313.1 Required Installation. Effective January 1, 2011, a residential fire sprinkler system shall be installed in one- and two-family dwellings and townhouses.

Exception: A residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with a residential fire sprinkler system.

R312.2 Design and Installation. Residential fire sprinkler systems shall be designed and installed in accordance with Section P2904 or NFPA 13D.

(Renumber subsequent sections)

Delete IRC Appendix P without substitution:

RB71

Public Comment 2:

Salvatore DiCristina, Code Solutions, Inc., requests Approval as Modified by this Public Comment.

Modify proposal as follows:

SECTION R313 ALARMS

R313.1.1 Carbon monoxide alarms. In new construction, dwelling units within which fuel-fired appliances are installed or have attached garages shall be provided with an approved carbon monoxide alarm installed outside of each separate sleeping area in the immediate vicinity of the bedroom(s).

R313.1.2 Where required-existing dwellings. In existing dwellings within which fuel-fired appliances exist or have attached garages, where interior alterations, repairs, fuel-fired appliance replacements or additions work requiring a permit occurs, or where one or more sleeping rooms are added or created, carbon monoxide alarms shall be provided in accordance with Section 313.1.1.

R313.1.3 Alarm requirements. The required carbon monoxide alarms shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.

(Renumber subsequent sections)

Drainage
between lots



	<p>Question comes up from time to time about the requirement for gutters as listed in section R801.3. Under chapter 8 requirements you have to have specific soil conditions to require roof drainage so unless those conditions exist, gutters with proper discharge are not required. There is another issue dealing with gutters that comes up as pictured above when you there are chapter 4 section R401.3 site drainage problems. Houses located closer than 10' from a property line that don't have the 6" in 10' as described in R401.3 shall have an alternate (approved by the Code official) method of correctly discharging water away from a structure. If roof run off is also contributing to water accumulation in these areas then gutters, downspouts and drains to a safe discharge point will also be required in the approved R401.3 site drainage system. In the picture above swale in grade is not well defined and sloped correctly (next code will require a 5% fall in grade from the house to a swale that has a 2% fall to discharge point) in addition gutters are adding to the problem by discharging into the swale between houses with a tight side yard. Gutters would be required and would have to be piped out of this area.</p>
<p>Exterior stairway terminations for handrail applications</p>	<div data-bbox="483 695 1317 1255" data-label="Image"> </div> <p>Issue with exterior handrail application comes up frequently related to where the handrail can terminate as shown above. A flight of stairs is defined by having a landing at the top and bottom of a flight of stairs. If a person can come down a flight of stairs to a landing the handrail can terminate at that point without going all the way to the sidewalk as pictured above (landings create flights of stairs). The additional concern at that landing would have to do with a guard requirement on open sides with drop off greater than 30". The concrete steps, as shown above, would need to be broken up with no more than 3 risers between landings so as not to require any additional handrails on other 4 riser flights and each tread and risers within each flight would still need to be uniformed (concrete steps as shown create a defined egress path to point of discharge which is sidewalk and uniformity of treads and risers would still be regulated). As shown in this picture the concrete steps are done by a different contractor and were part of the sidewalk work. The problem indicated in the picture is when you come down the flight of stairs the 1st concrete step off the last masonry is not 36" deep and could not be considered a landing. Because its not a landing 2 problems occur, first the handrail would need to go all the way down to sidewalk, second the concrete step is actually deeper than the masonry and is neither a uniform tread (all concrete treads would need to be uniformed with</p>

	<p>masonry steps since not broken up by landings) or compliant landing, current application pictured would have to be redone to achieve compliance with one or the other as listed in section R311.5.3.2 and R311.5.4.</p>
<p>Builder/ Designer certification label</p>	<div data-bbox="630 262 1169 676" data-label="Form"> <p><u>Builder/Designer Certification</u> (as listed in section N1101.8 of the NC Residential Code)</p> <p><u>Component R-Values as applicable</u></p> <p>Ceilings: _____ Slab: _____ Walls: _____ Basement walls: _____ Floors: _____ Crawl space walls: _____ Mass wall _____</p> <p>Fenestration U Factor _____ Fenestration SHGC (solar heat gain coefficient) _____ (Doors and 15sq ft total exempt from SHGC) Ducts outside conditioned spaces R-value _____</p> <p>_____ <i>Builder name</i> <i>Builder/Designer signature</i></p> <p><small>*This permanent certification label required to be fixed to electrical distribution panel, kitchen cabinet or other approved location.</small></p> </div> <p>In the 2009 Code there will be a new requirement in section N1101.8 for the builder to provide a permanent label on the panel box or kitchen cabinet or other approved location that identifies thermal envelope components. The label above is a sample only and contains all the items as listed in the code. We will make this label template available under the forms section of our website at www.meckpermit.com and will be posted shortly.</p>
<p>Roll up overhead doors and garage definition</p>	<p>Question asked about when does a garage become a garage if someone has a roll up door and calls it a workshop or an unfinished basement has a roll up door with no driveway access does that area need to be looked at as a garage and separation requirements come into play. Issue is being further discussed along the lines of limiting the opening allowed for a roll up door to 6' without being called a garage area. A formal interpretation is being drafted for consideration in dealing with this issue and will be out shortly.</p>
<p>Pressure treated laminated beam or timbers</p>	<p>Laminated beams and timbers used in exterior applications subject to decay as listed in section R319 must be properly labeled for exterior application just as other lumber or plywood type products; there is no exception under the code for laminated beams. Section R319.2 as listed below identifies information that must be properly shown on the product to approve its usage. This information can be displayed by <u>stamp or by a label</u> from the manufacturer fastened to the product.</p> <p>R319.2.1 Required information. The required quality mark on each piece of pressure preservative treated lumber or plywood shall contain the following information:</p> <ol style="list-style-type: none"> 1. Identification of the treating plant. 2. Type of preservative. 3. The minimum preservative retention. 4. End use for which the product was treated. 5. Standard to which the product was treated. 6. Identity of the approved inspection agency. 7. The designation "Dry," if applicable.

Retaining walls
for pools as
barriers



The use of barrier around pool areas on residential sites is regulated by Appendix G section AG105.2 and item #5 addresses the use of solid barriers such as masonry walls and reads “Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints”. The limitation in this section of the code is to prevent a child from being able to climb this type barrier. A keystone retaining wall system used as a barrier would be prohibited since the gaps and sometime inset pattern would allow for a child to climb the wall and access a pool area. As shown in the picture above a proper barrier would be required at the top of this type of retaining wall system.

Townhouse
offsets and 1
hour rated wall
assemblies



Issue has come up with townhouses as pictured above where there is a unit that projects out further than an adjacent owner. At this offset this wall becomes a 1 hour rated wall (per section R302) and the floor joists and beam are membrane penetrations into this assembly. Several options were discussed the first being the LVL beam, as long as a 3ply, would be considered as a heavy timber application and could penetrate the wall as long as sheetrock (5/8” type X) is run up and tight around

	<p>the sides or points of penetration. The I-joists could not penetrate as shown and 1 of 3 methods (may be other options) were discussed. If a double LVL beam was installed on top of the wall (flush header application) then the I-joists can be hangered to the header and sheetrock run up and around the sides of the I-joists. Another options was that the 2 I-joists shown could be cut off the wall and a flush header of an approved material could be installed off the wall so I-joists never penetrate, sheetrock can then be run behind the header in this application. The last method was for single I-joists application only. The rated wall can be pre-rocked at the floor level and the I-joists can be hangered through the sheetrock to whatever blocking had been installed for hanger support. Plan review will be looking closely at this application and may request addition information if not clearly defined on townhouse plans.</p>
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